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ABSTRACT

One of five modules in the curriculum development series of the 16-module series designed to train vocational education curriculum specialists, this module is intended for use in classes or individual study arrangements at the preservice or inservice level by students with varying amounts of experience in vocational education. (These modules are revised versions of earlier study guides--see note.) Introductory materials include an overview, instructions to the learner, detailed list of behavioral goals and objectives, and resources needed to complete learning activities. The module is divided into three sections, each based on one of the goals. The first section identifies barriers to equal education faced by special students and legislation to eliminate these barriers. The second section focuses on developing action plans including techniques for assessing and instructional methods for meeting needs of special students. In section 3 are provided procedures and guidelines to review and modify biased curricula, facilities, and materials. Each section follows a standard format: text, individual study activities, discussion questions, and group activities. A summary of the module follows. Appendixes include a fact sheet on sex stereotyping in measurement instruments, suggested responses to the study activities, a self-check, responses to the self-check, and recommended references. (YLB)

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VOCATIONAL EDUCATION CURRICULUM SPECIALIST

VOCATIONAL EDUCATION FOR STUDENTS WITH SPECIAL NEEDS

Module 6

U.S. DEPARTMENT OF EDUCATION
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CE 031 810

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VOCATIONAL EDUCATION FOR STUDENTS WITH SPECIAL NEEDS

Module 6

Judith A. Appleby

Jeanette D. Wheeler

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Introduction

This module focuses on the special needs of handicapped, female, disadvantaged, non-English-speaking, and racial and ethnic minority students. The purpose of this module is to provide curriculum specialists with information that will help them develop or modify curricula and materials for these special groups of students. This module presents an overview of legislation related to the education of special students and it describes programs that educators can implement for special student groups.

With its emphasis on individualized and competency-based instruction, vocational education lends itself to modification for special groups. The task, however, is not simple; wide differences in language and culture, economic and educational levels, physical abilities, and mental attitudes call for comprehensive answers to the problems inherent in educating diverse student groups.

Overview

The first section of the module points out barriers to equal education faced by special students and major legislation designed to eliminate these barriers. Legislative provisions are presented that are administered through the Department of Labor, the Department of Education, and the Office of Civil Rights.

The second section of the module is intended to help the curriculum specialist assess and meet the needs of special student groups. By developing a step-by-step action plan for a particular special group, the curriculum specialist will begin to see how instructional methods, curriculum, and materials can be adapted.

The last section provides procedures and guidelines that can be used to review and modify biased curricula, facilities, and materials. In this section, vocational educators are encouraged to make only the changes necessary to ensure equal access to vocational training programs for all students.

Instructions to the Learner

Self-Check items and possible responses to them are found in the appendices. These questions have two purposes. First, before you begin work on the module, you may use them to check

quickly whether you have already learned the information in previous classes or readings. In some instances, with the consent of your instructor, you might decide to skip a whole module or parts of one. The second purpose of the Self-Check is to help you review the content of modules you have studied in order to assess whether you have achieved the module's goals and objectives.

You can also use the list of goals and objectives that follows to determine whether the module content is new to you and requires in-depth study, or whether the module can serve as a brief review before you continue to the next module.

Goals and Objectives

Goal 1: Identify the specific legislative mandates dealing with the vocational education of special student populations (handicapped, disadvantaged, women and men in nontraditional programs, limited-English-speaking persons).

Objective 1.1: Describe barriers that may prevent special students from fully participating in vocational education programs.

Objective 1.2: Identify and describe the three federal laws concerning vocational education for the handicapped.

Objective 1.3: Relate the provisions of the Vocational Education Act of 1963 and the Amendments of 1968 and 1976 that apply to handicapped and disadvantaged students."

Objective 1.4: Identify in the Amendments of 1976, and discuss the legal implications of, provisions that apply to overcoming sex discrimination and stereotyping in vocational education programs.

Objective 1.5: Relate legislative provisions supporting vocational instruction for persons with limited English-speaking ability.

Goal 2: Develop an action plan that includes specific techniques for assessing, and instructional methods for meeting, the needs of students with special needs.

Objective 2.1: Identify the major components of and suggest guidelines for developing an action plan.

Objective 2.2: Complete an action plan for a special student enrolled in a vocational program.

Goal 3: Develop guidelines and procedures for reviewing and modifying curricula, instructional materials, and facilities that may be biased against groups of students with special needs.

Objective 3.1: Review existing guidelines for determining and modifying vocational curricula, instructional materials, and facilities for handicapped vocational students.

Objective 3.2: Review existing guidelines for sex-fair and racially-fair educational materials.

Resources

In order to complete the learning activities in this module, you will need information contained in the following publications:

Albright, L. Administering programs for handicapped students. Professional Development Series, No. 3. Arlington, VA: American Vocational Association, 1979.

Wall, J. (Ed.). Vocational education for special groups. Sixth Yearbook of the American Vocational Association. Washington, D.C.: American Vocational Association, 1976.

GOAL 1: Identify specific legislative mandates dealing with the vocational education of special student populations (handicapped, disadvantaged, women and men in nontraditional programs, limited-English-speaking persons).

Federal Laws Concerning Vocational Education for Students with Special Needs

In recent years, federal legislation has been passed to help ensure the rights of students with special needs. This legislation pertains to civil rights in education, vocational preparation, and job placement and promotion. These laws provide a basis for overcoming some of the situational dispositional, and institutional barriers discussed below.

Situational Barriers to Equal Vocational Opportunities

These barriers include "real" obstacles such as lack of time and lack of money. Obtaining money to pay tuition and fees or to purchase required tools and equipment may seem an insurmountable obstacle. Finding money to pay for child care is another example of a barrier that afflicts young mothers who are single heads of households. Individuals who are working at low-paying, low-level jobs may also be unable to attend vocational classes that are offered when they are working.

Dispositional Barriers to Equal Vocational Opportunities

These are barriers related to attitudes and to perceptions about oneself as a learner. A person with limited English-speaking ability or with little experience in organized learning may lack the self-confidence necessary to even find out what vocational programs are available. An older woman who has never worked outside the home may feel she has no ability to learn skills to enter the world of paid employment. To further complicate these feelings of inadequacy, individuals often mask their lack of confidence by expressing a lack of interest in learning.

Institutional Barriers to Equal Vocational Opportunities

Frequently, educators make statements such as "Our programs are open to everyone. If 'they' don't enroll, there's nothing we can do." However, institutional barriers have discouraged special students from participating in vocational education activities. Some discouraging practices and procedures are inconvenient schedules or locations; full-time fees for part-time study; programs with stringent prerequisites or entrance requirements; lack of open entry-open exit courses; courses of study inappropriate for a region or population; lack of transportation; and lack of recruitment strategies to inform special students of available services.

Federal Laws Concerning Vocational Education for the Handicapped*

This section includes a brief overview of three laws:

- the Rehabilitation Act of 1973 (P.L. 93-112);
- the Education of the Handicapped Act, Part B, amended in the Education for All Handicapped Children Act of 1975 (P.L. 94-142); and
- the Vocational Education Act of 1963 amended in the Education Amendments of 1976 (P.L. 94-482).

This section is intended only to provide a simplified overview of the influence of this legislation on vocational education for the handicapped. For specific details and exact wording of the laws, refer to copies of the original documents. These laws are printed in the Federal Register (FR) and, following compilation, they are printed in the Code of Federal Regulations (CFR). These two government documents can be purchased from the United States Government Printing Office, or they can be requested from a Representative, Senator, or a major library.

The Rehabilitation Act of 1973 (P.L. 93-112) Section 504. This law is generally considered the civil rights law for han-

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* This material is adapted from the Handbook for Vocational Education for the Handicapped, Home Economics Instructional Materials Center, Texas Tech University, Lubbock, Texas, July 1978.

dicapped people of all ages in all areas of life. The section of this law that most concerns educators is Section 504. Basically, Section 504 says that any program or activity receiving federal assistance may not discriminate on the basis of mental or physical handicaps. The regulations forbid discrimination of any nature, whether intentional or unintentional. They also stipulate that affirmative action be taken to assure equal opportunities for handicapped persons.

Regulations for Section 504 have had a sweeping effect on public school programs for handicapped students--including vocational education programs. In addition to reaffirming every handicapped student's right to a free, appropriate education, the law includes these important requirements:

- Handicapped persons must have opportunities to participate in or benefit from services equal to those that are provided to others; exclusion of handicapped children from elementary or secondary programs is a violation of their civil rights.

- Postsecondary vocational programs and colleges receiving federal funds may not discriminate against applicants on the basis of handicap. They must accommodate the needs of qualified handicapped students. These accommodations cover a wide variety of services and arrangements to compensate for physical, sensory, learning, and emotional disabilities, including lengthening the time it takes to complete a course, revising the way courses are taught, and providing interpreters and readers, tutors, and special aids and equipment.

- All programs and services must be barrier-free. Programs must be made accessible immediately. This can entail changing program locations or providing alternative ways for handicapped individuals to use facilities and equipment.

The most important difference in Section 504 of P.L. 93-112 and P.L. 94-142 (described next) is in the definition of handicapped. The Section 504 definition is much broader in scope than the P.L. 94-142 definition. The reason this difference is important is that under the Section 504 definition, more people would qualify for special education services.

The Education of the Handicapped Act/Part B, Education for All Handicapped Children Act of 1975 (P.L. 94-142). The Education of the Handicapped Act (EHA) was passed in 1970 to better

meet the educational needs of handicapped individuals. However, this Act fell short of its intended goal. As a result, Congress passed amendments in 1974 to allow time for development of a comprehensive educational plan for the handicapped. Ultimately, the Education for All Handicapped Children Act of 1975 (P.L. 94-142) was developed to provide benefits and ensure rights for handicapped youth. The major emphasis in the amending process was on Part B. The focus for the section below is primarily on Part B.

This law concerns educational services provided for handicapped individuals from birth to twenty-one years. The regulations have four major purposes, which are as follows:

- To assure that all handicapped children have available to them a free, appropriate public education
- To protect the rights of handicapped children and their parents
- To assist states and local areas in providing education for all handicapped children
- To assess and ensure the effectiveness of efforts to educate handicapped children

Keep in mind that:

- This landmark legislation has been phased in gradually. In September 1977, the requirement for individualized education programs (IEPs) for every eligible handicapped child went into effect. By September 1978, every state had to ensure that a free, appropriate program was being provided to all handicapped children aged three to eighteen who were found to be in need of special education and related services.
- Individually designed education services for handicapped children must be provided not only to children in classrooms, but also to children who are homebound, in hospitals, and in institutions.
- When IEPs are drawn up, appropriate vocational services must be included, designed to meet each child's needs and abilities...just as other services are included. The law's definition of "special education" includes "vocational education...organized educational programs...directly related to the preparation of individuals for paid or unpaid employment, or for additional preparations for a career requiring other than a baccalaureate or advanced degree."

- The law also specifically includes industrial arts and consumer and homemaking programs as appropriate programs for handicapped children. These programs offer important skills; all children should have the option of participating in them...in preparation for more advanced vocational education.

- Parents must be included in conferences when decisions are made about each child's individualized education program. Handicapped students, too, have the right to be included in IEP meetings.

- Individual education programs must be drawn up for children at all school levels--from preschool through high school.

This legislation has had a major impact on the vocational education of handicapped students. States are now charged with providing appropriate, equal educational opportunities for handicapped students and with supplying proof of how this is to be accomplished. This proof entitles the states to apply for federal assistance in providing educational opportunities for handicapped students.

The Vocational Education Act of 1963/Amended in Education Amendments of 1976 (P.L. 94-482). The Vocational Education Act (P.L. 94-482) of 1976 must be considered in conjunction with P.L. 93-112 (Section 504), P.L. 94-142, and other federal regulations if the overall impact of the legislation is to be fully understood. Direct reference is made in P.L. 94-482 to the other regulations.

This law was passed to strengthen the abilities of states to provide vocational education--especially to groups for whom the need is most acute. This law has an important relationship to Public Law 94-142 and can contribute enormously to a handicapped student's future employability. The law extends help to handicapped children and to disabled individuals of all ages who need vocational education. It contains the following requirements:

- Ten percent of federal funds allocated to states under section 120 of the Vocational Education Act are to be spent on the cost of special programs, services, and activities for the handicapped. These special funds may go to school districts for secondary school programs and also to postsecondary adult vocational education programs and community colleges.

- Funds are not allocated automatically; local education systems (and postsecondary schools) must apply to states for a share of the money.

- Vocational education programs using these funds in secondary schools must carry out the goals of Public Law 94-142 and comply with its requirements. This means that all the rights guaranteed under P.L. 94-142 are extended to handicapped children served under the Vocational Education Act. Parents' rights to due process are protected, including the right to participate in decision-making, to accept or reject proposed education plans, and to call for a hearing and appeal if dissatisfied.

- The law specifically states that vocational education plans for an individual child must be coordinated with the child's IEP.

- Advisory councils must be set up on both the state and local levels. The law requires that the state council include "one or more individuals...who have special knowledge, experience, or qualifications with respect to the special education needs of physically or mentally handicapped persons." Although the law does not require representation of the handicapped on local advisory councils, advocacy groups can and should press for consumer representation to speak for the rights and needs of disabled individuals.

- Five-year state plans must be drawn up in order for a state to receive funding under this law; plans must show how the ten percent allotment will be used to meet the needs of handicapped individuals and how vocational education programs will coordinate with special education programs. These plans are updated annually. In drawing them up, a state must gather the views of many people--including parents, teachers, administrators, and school boards. Hearings must be held to give everyone concerned a chance to speak up.

- Local school systems must also submit annual plans to the state, outlining how they propose to meet vocational education needs and what programs they want to start or expand.

Among the vocational services for handicapped children that are available under this law are vocational instruction, curriculum development and modification to enable handicapped students to take part in regular programs; modification of

vocational equipment to enable students to develop skills leading to employment; vocational or work evaluation; supportive services such as interpreters for deaf students, note-takers, readers, and tutorial aides; vocational guidance and counseling; and job placement and follow-up services.

Summary. The chart on the following pages summarizes and compares the three federal laws concerning vocational education for the handicapped discussed in this section.

COMPARISON OF FEDERAL LAWS CONCERNING VOCATIONAL EDUCATION FOR THE HANDICAPPED

Points	Rehabilitation Act of 1973 P.L. 93-112, Sect. 504	Education for All Handicapped Children Act of 1975 P.L. 94-142	Vocational Education Act of 1963/Education Amendments P.L. 94-482 of 1976
Purpose	Prohibits discrimination on the basis of handicap in all federally-financed programs and activities.	Provides necessary funding for public schools to ensure a free and appropriate education for all handicapped youth from birth to age 21.	Assures set-aside funds for vocational education for the handicapped. Also requires 50% matching of local and state funds.
Definition	States a broader definition of handicapped than P.L. 94-142. Includes some individuals not covered under P.L. 94-142 definition.	States specific definition of handicapped and enumerates criteria for classifying handicaps.	Concurs with P.L. 94-142 definition of handicapped.
Administration	Department of Health and Human Services (Office of Equal Educational Opportunity)	U.S. Department of Education (Office of Special Education and Rehabilitative Services)	U.S. Department of Education (Office of Vocational and Adult Education)
Advisory Groups	Requirements: No mention of establishment of Advisory Group except that handicapped individual cannot be denied opportunity to be on advisory or planning board.	Requirements: State Advisory Panel (on the education of the handicapped)	Requirements: State Board for Vocational Education; State Advisory Council on Vocational Education; Local Advisory Council

(continued)

COMPARISON OF FEDERAL LAWS CONCERNING VOCATIONAL EDUCATION FOR THE HANDICAPPED (continued)

Points	Rehabilitation Act of 1973 P.L. 93-112, Sect. 504	Education for All Handicapped Children Act of 1975 P.L. 94-142	Vocational Education Act of 1963/Education Amendments P.L. 94-482 of 1976
Funding	Two major implications for funding: • Educational agencies are required to furnish the same benefits and resources for handicapped as for non-handicapped students. • Use of funds should be so directed as to provide for participation of handicapped students in regular vocational education programs with supplementary aid and services.	The same two major implications for funding apply to this law.	The same two major implications for funding apply to this law.
Procedural Safeguards	The following provisions are given: • Identify annually eligible handicapped persons not receiving a free appropriate public education. • Place in least restrictive environment. • Include in extracurricular activities such as clubs, P.E. • Ensure comparable facilities, etc. for handicapped.	The following provisions are given: • Guarantee of due process procedures • Development of individual educational programs • Placement in least restrictive environments • Use of nondiscriminatory testing and evaluation procedures • Maintenance of confidentiality of information	The following provisions are given: • Requires states to show written proof of consistency of Five-Year and Annual Program Plan with state plan for education of handicapped. (Assures compliance with procedural safeguards of P.L. 94-142.) • Continues set-aside funds for programs for handicapped and requires allotment of 50% matching state and local funds.

(continued)

COMPARISON OF FEDERAL LAWS CONCERNING VOCATIONAL EDUCATION FOR THE HANDICAPPED (continued)

Points	Rehabilitation Act of 1973 P.L. 93-112, Sect. 504	Education for All Handicapped Children Act of 1975 P.L. 94-142	Vocational Education Act of 1963/Education Amendments P.L. 94-482 of 1976
	• Use appropriate evaluative techniques and qualified people when planning handicapped student's placement. • Use specified safeguards to ensure rights of handicapped. • Provide non-discriminatory guidance, counseling, and placement.		
Individualized Education Program (IEP)	Educational services for handicapped students must meet their individual needs as effectively as the needs of non-handicapped students are met.	State Education Agency must ensure development and implementation of IEP for every handicapped student.	Vocational program for each handicapped student must conform to student's IEP.
Educational Placement	Handicapped students must be educated with nonhandicapped to maximum extent possible. They may be removed from regular class environments only when achievement in regular classes with use of support aids is not feasible.	Handicapped students must be placed in regular educational environment unless evidence can be given that even with support aids this situation will not be satisfactory.	Handicapped students must be prepared for jobs in the "least restrictive environment." Vocational programs must conform to student's IEP.

Federal Laws Concerning Vocational Education for Disadvantaged Students

It has been difficult to arrive at a consistent and concise definition of "disadvantaged" students that could be agreed on by legislators and educators alike. Since the passage of the Vocational Education Act of 1963, the 1968 Amendments, and the various employment and training laws, the word has been interpreted broadly and narrowly, and has included everything from income level to racial group. In determining how vocational education money for disadvantaged students will be spent, states have set up their own criteria for determining who the disadvantaged are. Definitions frequently include persons subsisting at or below the poverty level, those who are marginally participating in the economy, and those whose social and educational skills are inadequate for the demands of modern society. Disadvantaged, therefore, includes those individuals prevented "from succeeding in regular vocational education programs" as well as those who are chronically unemployed or underemployed.

Employment and training legislation. The Manpower Development and Training Act of 1962 (MDTA) and subsequent amendments were intended to expand vocational education to retrain adults replaced by automation and to provide skill training for youth, whose rate of unemployment was almost twice that of other young people. The Comprehensive Employment and Training Act of 1973 continued with its focus on training people in an effort to reduce unemployment for special target groups.

The Youth Employment and Demonstration Projects Act of 1977 (YEDPA) was also passed to encourage youth employment. YEDPA specifically focused on youth and provided a clear mandate to coordinate vocational education (school-based skill and general training) with community-based training.

Vocational education and disadvantaged students. The 1963 and 1968 legislative provisions called attention to students with special needs and directed that 15 percent of all federal vocational money disbursed to the states be spent on them. The 1968 Amendments also provided for the use of federal funds for guidance and counseling, evaluation, and instructional materials development. Experimental and demonstration projects (Parts C and D) were encouraged, particularly as they proposed solutions for the problems of special populations such as the disadvantaged and handicapped.

The Education Amendments of 1976. Programs authorized under this Act give priority to special target groups, and, in particular, to the disadvantaged. However, added to the academic and occupational components was a requirement to evaluate programs. These evaluation results should provide valuable insight into what kinds of programs work best with specific target populations.

Federal Laws Concerning Vocational Education and Sex Discrimination and Stereotyping

The Education Amendments of 1976 recognized that laws dealing with equal pay for equal work and equal access to job opportunities were not enough to change many years of traditionally low-level employment for women. The legislation charged vocational educators with eliminating sex discrimination and stereotyping in vocational policies, programs, recruitment, admissions, courses, teaching, and counseling. The mandate is not limited to students. It affects vocational education at the state, local, and classroom level.

Numerous pieces of federal legislation are related to eliminating sex discrimination in education and employment. Title IX of the Education Amendments addresses sex discrimination and stereotyping in all aspects of education. Title II legislation mandates the elimination of sex stereotyping and bias in vocational education. Congressional intent is that the two laws work together. Vocational educators need to understand the intent of Title IX and know the implications of Title II.

The intent of Title IX. Originally, Title IX was proposed as an amendment to the Civil Rights Act of 1964, which did not identify sex as a category of discrimination. It was signed into law as part of the Education Amendments of 1972. The key provision of the legislation reads:

> NO PERSON IN THE UNITED STATES SHALL, ON THE BASIS OF SEX, BE EXCLUDED FROM PARTICIPATION IN, BE DENIED THE BENEFITS OF, OR BE SUBJECTED TO DISCRIMINATION UNDER ANY EDUCATION PROGRAM OR ACTIVITY RECEIVING FEDERAL FINANCIAL ASSISTANCE...

With certain exceptions the law bars sex discrimination in any academic, extracurricular, research, occupational training, or other educational program operated by any organization or agency that receives or benefits from federal aid. These provisions apply to students of all ages.

Implications of Title II, Education Amendments of 1976. For the first time, specific provisions to eliminate sex stereotyping and bias were written into vocational education legislation. This was deemed necessary because of dissatisfaction with the results of Title IX. Title II of the Education Amendments of 1976 amends the Vocational Education Act of 1963 and the Vocational Amendments of 1968 and affects state and local vocational education administration and programs.

Title II requires each state to submit a five-year plan that includes policies and procedures that will be followed for assuring equal access to vocational education programs as well as an annual program plan and accountability report. In addition, each state is required to designate full-time personnel to assist the state in eliminating sex bias in all vocational education programs.

Significantly, Title II specifies that local agencies and institutions shall have an advisory council that has an "appropriate representation of both sexes and an appropriate representation of the racial and ethnic minorities found in the program area, schools, community, or region which the local advisory council serves."

Major concerns related to sex stereotyping considered in drafting the rules and regulations for Title II include:

- equal access to vocational programs by males and females;
- recruitment practices;
- enrollment patterns;
- membership of advisory councils;
- guidance and counseling;
- inservice and preservice training;
- curriculum materials based on human needs rather than traditional roles;
- involvement of women in developing and administering proposals, projects, and programs; and
- special needs and services.

Comparison of the 1976 Education Amendments and Title IX. The provisions of the Education Amendments of 1976 that pertain to sex discrimination and sex bias are similar to the requirements of Title IX (Education Amendments of 1972) in basic intent: both are directed at ensuring that equal opportunities are provided to females and males in vocational education programs. There are, however, several significant differences between Title IX and the Amendments:

- Title IX addresses the issue of sex discrimination in education programs; it generally requires that persons may not be excluded from, denied participation in, or be treated differently in education programs. The Education Amendments not only address sex discrimination, which is defined as "any action which limits or denies a person or a group of persons opportunities, privileges, roles, or rewards on the basis of their sex," but also sex bias, or "behavior resulting from the assumption that one sex is superior to the other," and sex stereotyping, or "attributing behaviors, abilities, interests, values, and roles to a person or group of persons on the basis of their sex."

- The Title IX regulation applies directly to local education agencies and institutions; with the exception of the local advisory council provision, the Education Amendments of 1976 apply directly only to State and Federal vocational education programs. They affect local vocational education programs and institutions indirectly through their specification of priorities and procedures for State use of Federal vocational education monies, which in turn affect State funding of various local vocational education programs and institutions.

- Title IX specifically prohibits a variety of forms of discrimination in education policies, programs, or practices. Those applying to vocational education include prohibitions of discrimination on the basis of sex in admissions, access to courses, facilities, treatment of students, course completion and graduation requirements, student employment, marital or parental status, and employment of education personnel. The Education Amendments of 1976 complement the specific prohibitions of sex discrimination that are established by the Title IX regulation with a mandate for the development of programs to overcome sex bias, stereotyping, and discrimination in vocational education and an authorization to States to use Federal monies for this purpose.

Other Related Legislation Affecting Vocational Education

Listed below are other legislative provisions that affect the schooling and job placement of vocational education students with special needs.

National Labor Relations Act and Related Laws (1935). This legislation requires unions to bargain for the same working conditions regarding wages, hours, recruitment, seniority, and promotion for women as well as for men.

Executive Order 11246. This order, as amended by Executive Order 11375, prohibits employment discrimination on the basis of race, color, religion, national origin, or sex by institutions or agencies with federal contracts of over $10,000. All contractors with contracts of $50,000 or more and 50 or more employees must have affirmative action plans.

Title VI of the Civil Rights Act (1964). This title prohibits discrimination against students on the grounds of race, color, or national origin by all institutions receiving federal monies.

Title VII of the Civil Rights Act (1964). This title, as amended by the Equal Employment Opportunity Act of 1972, prohibits discriminatory practices in terms and conditions of employment on the basis of race, color, religion, national origin, or sex by all institutions with 15 or more employees.

Title VII and Title VIII of the Public Health Service Act (1971). These titles, as amended, prohibit discrimination on the basis of sex in admissions and against some employees in health personnel training programs of institutions receiving federal monies.

Equal Pay Act (1963). This act, as amended by the Educational Amendments of 1972, prohibits sex discrimination in salaries and most fringe benefits.

Regulations of the Bureau of Apprenticeship and Training. These regulations prohibit discrimination on the basis of race, creed, color, sex, and national origin in selection of participants and conduct of programs.

National Priority Programs

Under this heading in the Education Amendments of 1976, states are directed to allocate 20 percent of their federal allotments to pay half the cost of vocational education for special groups. The state plans must set out explicitly the uses the state intends to make of those funds to meet the special needs of the target populations (handicapped, disadvantaged, persons with limited English-speaking ability, Indians).

In addition, state departments of vocational education are expected to assist LEAs in providing high-quality vocational education by evaluating program effectiveness and using evaluation results to revise and improve programs.

Funds are also available for states to support exemplary and innovative programs, including "programs of effective vocational education for individuals with limited English-speaking ability." The intent of the legislation is clear--special populations may need special help to succeed in vocational training, and national and state education agencies are committed to providing that help.

Individual Study Activities

1. Obtain copies of the three federal laws affecting vocational education for the handicapped--P.L. 93-112, P.L. 94-142, and P.L. 94-482. You may obtain these copies from the U.S. Government Printing Office, a Congressional Representative or Senator, or a major library. Locate the sections of these laws that are most relevant for providing vocational training to handicapped persons. Briefly describe in a two-page paper, the purpose and scope of the assistance available through each of these federal programs.

2. Select one special student group you are interested in learning more about. Read about the students you've chosen in Wall, J. (Ed.). Vocational education for special groups (Sixth Yearbook of the American Vocational Association). Washington, D.C.: American Vocational Association, 1976; in a journal such as Voc Ed; in current news magazines; or in books or articles listed in the Recommended References section of this module. Prepare a summary of your 20-40 pages of reading.

Discussion Questions

1. Do you have classes or know of classes in your institution or district that have enrollments of only one sex? What do you feel you can do, as an administrator, teacher, or counselor, to change this distribution? Where do you feel the most changes should be made--in the community, by employers, in the home, at school--to encourage students to enroll in programs of their choice rather than by traditional enrollment patterns?

2. Over the years many citizens have maintained that legislation does not change how people feel, think, or act, particularly in relation to providing equal access to education and to employment. Do you think vocational education laws have resulted in positive changes for any of the special groups of students discussed in this module? In what ways?

Group Activities

1. Study copies of the federal laws concerning vocational education for the handicapped, disadvantaged, women, or limited-English-speaking students. In small groups, develop a 15-minute presentation on the implications of

these laws for vocational education programs. The presentations should answer such questions as:

- What categories of special students are covered by the laws?
- Are specific changes in educational programs mandated? If so, what are the changes?
- Does current legislation provide for program modification?
- What changes in vocational education took place as a result of the law?

2. Form two teams to debate the following statements:

- "Special students should receive training for jobs that are selected on the basis of what persons like themselves have done before." In debating this issue, consider the importance of individual differences.
- "The only barriers women face in entering vocational programs dominated traditionally by males are their own anxieties, lack of confidence, and internal conflicts."
- "Vocational educators are not preventing students with special needs from succeeding in their programs. The problem is that counselors, parents, and employers discourage those special students from even enrolling in the first place."

GOAL 2: Develop an action plan that includes specific techniques for assessing, and instructional methods for meeting, the needs of students with special needs.

Developing Action Plans for Special Needs Students

On the following pages, you will find a series of questions that will help you work with teachers to develop an instructional plan for special students in vocational education These questions will help you identify important considerations in planning instruction, carrying out the instructional plan, and evaluating the outcomes of your plan. In answering this series of questions, you and the classroom teacher should have a particular student in mind or access to an information file that would be sufficient for making reasonable inferences and judgments about student needs and abilities.

Planning Instruction for Special Students

What do you need to know about the special student?

- What is the student's name?
- Why is the student special?
- How would you describe his or her problems?
- Are there associated problems or disabilities? What are they?
- What physical, emotional, or mental characteristics are clearly evident that would limit employability? Could any of these limiting characteristics be modified through training, use of a device, or environmental modifications?
- What evidence can you find that suggests whether the student copes with his or her problems effectively and is able to get things done?

- What are the student's existing interests, demonstrated abilities, and strengths as revealed by a prevocational assessment?

- What have you learned from other educators relating to medication, attendance, and procedures to follow if health care is required in the classroom or work station?

What do you need to know about yourself?

- Do you usually modify your regular class procedures to accommodate individual differences? If not, why not? If so, what modifications do you make?

- Are you worried about the prospect of having a special student in your classroom? If so, what are your main concerns?

- When dealing with the special student, how will you check yourself to be sure that your feelings create a favorable learning environment rather than an inappropriate reaction (pity, condescension, rejection) from other students?

- Which of your strengths as an instructor will be important to the special student?

What about job/task analysis?

- In the current job market, what types of jobs in your occupational area might be open to the trained special student?

- Have you prepared a breakdown of the tasks involved in these jobs? Which tasks could the special student perform and which would be especially difficult?

- Can you give the student any examples of other special students who have been employed in this type of occupation?

- Is it possibile to re-engineer the job so that the very difficult (inefficiently performed) tasks could be eliminated or reassigned to another person?

- After comparing the job tasks to your course of study and class activities, what task-level problems do you consider likely? What might you do about them?

What about cooperative goal setting?

- After analyzing the job market and the special student's potential, do you think the student needs vocational counseling? If so, what type of counseling?
- What aspects of the student's prevocational assessment should be shared with the student so that realistic goals can be set?
- When setting goals cooperatively, who should be involved?
- What short-term goals have been cooperatively set?
- When will you assess whether the short-term goals have been accomplished? What performance criteria will you use? How do these criteria differ from the criteria applied to other students?

What about needed course modifications?

- In your curriculum, what course content modifications are needed to promote the student's skills development? What information and steps are most important?
- What course modifications are needed to increase the student's general understanding of the world of work?
- What course content modifications are needed to improve the student's work habits, interpersonal relationships, and personal safety?
- What work experiences would be appropriate for this student?

What about other needed modifications?

- What equipment modifications are important to help the student in assigned tasks?
- What facility modifications or additions are appropriate for the student? What about access to the class,

the classroom itself, the work station, and related facilities such as storage areas?

- What transportation assistance is advisable to enable the student to travel to the class or the work experience location?

What are helpful resources?

- What special instructional materials might be obtained to help the student master your course? Where can you get them?
- What persons should you involve as advisors, interpreters or aides, and teammates for the student?
- What outside agencies may provide special help or funds? What specific help could be given the student?

Carrying Out the Instructional Plan

What information did you obtain from student assessment following the initial instructional period?

- To what extent did the student reach the goals that were cooperatively set for the initial period? Were tasks accomplished on time? Were performance skills satisfactory? Were work habits satisfactory? Were social relationships satisfactory? Were other goals met?
- In those areas in which the student's progress was unsatisfactory, what goal adjustments should be made for the next period?
- In those areas in which the student's progress was satisfactory, was the student challenged to reach his or her full potential?
- What is the student's self-appraisal so far?

What is your initial assessment of yourself and others?

- In the initial period of instruction, were you able to project a positive, supportive attitude? If not, what prevented it? How can this factor be changed for the next instructional period?

- Did you find yourself constantly concerned about the special student, or were you able to take the student's individual differences in stride?

- Did you get the kind of help you wanted from others? From the special educator? Classroom interpreter or aide? Other students? Administrators? Other support persons?

- If this student is in a work experience setting, how did the employer and co-workers react to the student?

What would you do to revise your instructional strategy?

- After reviewing the initial instructional period, what goals would you consider appropriate for the student in the remainder of the course?

- Based on the results of the initial instructional period, what modifications would be appropriate to meet the needs of the student during the remainder of the course?

Evaluating Outcomes

What is the student's development in vocational skills?

- What skills, subskills, and levels of performance has the student developed during the course?

- What skills, if any, need further development to increase the student's employment potential? To whom would you refer the student for special help on each of these skills?

What is the student's development in work attitudes and habits?

- What specific work habits has the student developed during the course?

- What specific work-relevant attitudes has the student developed during the course?

- What attitudes and habits, if any, need further development to increase the student's employment potential? To whom would you refer the student to help develop these attitudes and habits?

What are the work placement considerations?

- Is there a favorable precedent for placement in this job situation--a previous special student or trainee, or an employer with a favorable viewpoint?
- How well has the student been trained for the type of work and level of responsibility required at the work station?
- Are there problems to be worked out in advance, such as transportation, co-worker attitudes?
- What is an appropriate trial period to give the trainee a fair chance without locking the employer in?
- What criteria can you and the employer agree on in advance for judging the trainee's performance on the job?

What was the student's performance on the job?

- What job tasks did the student perform at an outstanding level?
- What job tasks did the student perform at an adequate level?
- What job tasks did the student perform at an inadequate level?
- What other appraisals of trainee performance do you have that affect employment potential?

What is your overall assessment of the outcomes?

- In your opinion, what student benefits or gains have been made as a result of the course?
- In the student's opinion, what benefits or gains have been made as a result of the course? How have you personally gained by this experience?
- What is your point of view about future experiences in instructing special students in regular vocational education classes?

Individual Study Activities

1. Read pp. 260-272, "Proposed Strategies in Developing Curriculums for Special Groups," in Wall, J. (Ed). Vocational education for special groups (Sixth Yearbook of the American Vocational Association). Washington, D.C.: American Vocational Association, 1976.

2. Using the information in this module, write an action plan for a special student you have worked with or will be working with.

3. Arrange for a visit to a vocational education program that demonstrates effective techniques for meeting the needs of one special group of students. You might choose a Job Corps facility, a displaced homemaker program, or a program for women in nontraditional vocational training. Contact your State Department of Education for recommendations about programs. (Some may be funded or sponsored by social service or community agencies or by the Department of Labor.) When you visit this program, identify:

   - the types of students served,
   - the special curricular needs and adaptations made, and
   - the recruiting and support services provided. (These can include everything from stipends and peer counseling to child care and job placement.)

Discussion Questions

1. On the first day of class, the drafting teacher discovers that one Spanish-speaking student does not understand English well enough to follow directions. What action might be appropriate?

2. Critical considerations in matching vocational training of handicapped students to employability are an analysis of the job market, an analysis of the tasks involved in available jobs, and an analysis of individual competencies to determine individual skills. How might such analyses be facilitated by a team approach involving the vocational educator, the special educator, a community representative, and others?

Group Activity

1. In a small group, select a particular special student group. Outline at least two actions that a vocational program might take in response to a major issue identified in the legislation for vocational education. For example, your group may choose to develop a plan to recruit disadvantaged students into a vocational program to train solar energy technicians. Of course, if your plan can be based on an identified need in your community, you may want to complete a detailed action plan for actual use.

GOAL 3: Describe and develop guidelines and procedures for reviewing and modifying curricula, instructional materials, and facilities that may be biased against groups of students with special needs.

Planning Vocational Programs for Special Needs Students

Vocational programs that include special students can be planned in basically the same way as any vocational program. State vocational education program standards provide guidelines that must be followed. These guidelines identify program objectives, purposes, requirements, and approvable schedules and programs. Also included are facilities, equipment, supplies, instructional materials, advisory councils, program planning, course content, youth leadership organization, evaluation and follow-up, and certification and qualifications of teachers. It is important for the curriculum specialist to follow these guidelines to ensure that a program meets state and federal regulations.

The guidelines do, however, allow for planning at the local level. This allows the teacher, working with the curriculum specialist, to respond to the special needs, interests, backgrounds, abilities, and levels of motivation of each student.

Instruction

Special needs students must learn to cope with everyday problems, develop a positive identity, prepare to obtain a job, and develop an understanding of community responsibility.

Many of the educational requirements of special students can be considered prevocational; that is, they include skills that are not specific to an occupational area but must be learned prior to employment. This category of requirements may include any of the following:

- Developing test-taking abilities
- Building interpersonal relationships on the job

- Résumé writing and interview skills (for a 40-year-old woman who has been a full-time homemaker or for a 17-year-old dropout, this may be a much-needed part of vocational training)
- Using the dictionary and the telephone directory
- Building physical strength through regular exercise programs (especially needed for females entering highly physical male-dominated occupations)
- Relating basic math and language skills to occupational areas
- Recognizing and reading safety signs
- Developing positive attitudes toward work (this can include everything from punctuality to looking for career steps beyond the entry-level position)

The list could continue, but the underlying premise remains--special students as a group may require special help to succeed in vocational education programs. However, in most instances, the same kinds of individual attention are vital to the success of all students. The teacher and the curriculum specialist should consider the following guidelines when planning vocational programs for students with special needs:

- View each student as an individual.
- Determine areas in which students can develop abilities.
- Focus on strengths rather than weaknesses of students.
- Realize that special needs students are capable of learning a variety of skills.
- Develop realistic objectives for students to experience achievement and success.
- Progress gradually toward higher levels of objectives and increased achievement.
- Expand the levels of objectives to include experiences in all domains of learning.
- Remember that the goal for each student should be employability.

Special students often benefit from instructional materials designed specifically for their needs. One of the most crucial considerations is the reading level of the material. Other considerations include the age, learning patterns, areas of training, and interests of the students. The curriculum specialist can help develop, adopt, or adapt instructional materials to special students' needs and abilities. The module in this series devoted to relating learning differences and instructional methods covers this topic in more depth.

How to use biased and stereotyped texts. One way to increase students' awareness of bias and stereotypes is to have them evaluate their own textbooks and other instructional materials. Having students examine examples of bias and stereotypes in language and pictures will lessen the impact of such information on their attitudes. Some classroom strategies are listed below:

- At the beginning of the school year, devote one or more classes to analyzing textbooks, and as films, film strips, slides, or tapes are used throughout the course, continue the analysis.

- Consider a unit on "Do Words Make a Difference?" Have students study the difference between negative, demeaning, and neutral language and find examples from their texts.

- Study the meaning of "Bias and Stereotypes." Have students count pictures of males and females, racial and ethnic minorities, older adults, and handicapped persons in stereotyped and expanded roles.

- Have students compare bias and stereotyping in different textbooks. Ask them to rate the books according to the most and least stereotyped.

- Have students analyze trade journals and other materials ordinarily used in class. Ask them to edit materials that are heavily biased and stereotyped, eliminating or changing such language and illustrations.

The following checklist provides an example of guidelines that might be used for evaluating bias and stereotyping in textbooks.

- Does the textbook make special students feel comfortable in learning about subjects from which they were formerly excluded?

- Does the textbook make a special effort to show males and females, teachers and adults, racial and ethnic minorities, and handicapped persons in nontraditional roles?

- Do learning activities and projects avoid stereotyping according to past traditional roles?

- When appropriate, are the historical and present-day accomplishments of special needs students included in the text?

- Does the textbook point out that employers are now required by law to employ the best qualified candidate regardless of sex, racial or ethnic background, age, or handicap?

- When appropriate, does the textbook include the legal status of men and women, property law, and the effect of marriage on property rights?

- Does the textbook dispel the myth that homemaking is only for females and outside employment only for males?

- Do textbooks on marriage and family portray a wide variety of life styles including single adulthood, the traditional marriage relationship, and the dual career marriage?

- Do textbooks on mechanical drawing, metals, plastics, electronics, woodworking, construction, machinery and agriculture point out to both males and females the advantages of acquiring the training for the labor market and practical skills for daily living?

- Do the textbooks dispel the myth that tools and power-driven machines are too dangerous for all special needs students to learn to use?

- Do the textbooks demonstrate that females have the right to pursue activities or careers in nontraditional skills where physical strength is required?

Underlying any of the guidelines is the goal of creating and expanding options and opportunities for all students. Educators and students alike must recognize the adverse affects of stereotyping and bias on both their school and work lives before they can understand the wider range of vocational options.

Motivation

What motivates one student may not motivate another. Listed below are several motivation techniques that can be used to stimulate student learning and participation in the classroom.

- A variety of teaching materials, visual aids, and resources can help motivate students. Audiovisual aids to consider include the following:

  Magnetic boards
  Actual objects
  Films, filmstrips, slides
  Television
  Radio
  Records
  Tapes (reel-to-reel or cassette)
  Videotapes
  Graphs, charts, diagrams
  Flip charts

- Providing a comfortable, attractive, functional environment helps to create student motivation. Work areas and desks or tables should be arranged to give the teacher easy access to all students and to allow students to see demonstrations and other instructional activities. Other elements such as lighting, odor of the room, ventilation, and room temperature should be controlled to provide a pleasant learning atmosphere.

- Introducing one step of a task at a time, giving directions slowly, and presenting subject matter that is relevent and at the student's level enhance student success and, subsequently, student motivation.

- Although support services are most often thought of as counseling and guidance functions, for many persons they must include stipends for books and equipment, help in finding child care and transportation, and tutorial aid. This measure of caring can encourage students to enter and to remain in school. For example, recruiting one female student for a high school welding class is only the first step; providing support by preparing the rest of the class, or recruiting a second student, are two small but significant ways to add support. Similarly, a tutor in basic English or a bilingual classmate may encourage a student with a limited understanding of English to remain in a difficult program. Special students need to feel that counseling personnel are easy to reach and talk to about current problems. Frequently, peer counseling can also help to motivate small groups of like students.

- Motivation is increased when students are convinced that someone believes in them. Confidence is encouraged by identifying individual interests, letting the students express their feelings, planning activities to meet students' physical and emotional needs, and using frequent positive reinforcement. As students progress and mature, reinforcers can be gradually decreased to help students become more self-motivated.

- Most special student groups will identify with role models who share their specific backgrounds and frustrations.

Modifying Facilities and Equipment

Flexibility is an important consideration in planning the classroom and laboratory for a vocational program since students enrolled in the program may have a variety of needs. The space and its furnishings should be adaptable for individualized and small group instruction.

The laboratory should be carefully planned in accordance with occupational work standards as well as instructional considerations. Efforts must be made to make the facility free of architectural and other physical barriers that might prohibit or limit students from participating fully in the program. However, the facilities or equipment should not be modified to the extent that the student could not function in an actual job setting. Regular facilities, tools, equipment, and supplies should be used whenever possible so that the program simulates actual employment situations. Special provisions and adaptations should be made with consideration of facilities and equipment in actual businesses and industries.

Standard unmodified equipment is generally less expensive than modified or special equipment and usually can be used by handicapped as well as nonhandicapped students. School personnel should consider purchasing equipment for which modification kits are available to ensure meeting the needs of both present and future students. Modification kits, such as special guards for a grinder or sewing machine attachments, permit use by persons with various handicaps and are generally less expensive than specially designed equipment.

Specially designed equipment available for vocational education programs includes: seats, desks, and small equipment such as one-handed rolling pins, bowls with suction bottoms for use in food preparation, or special typewriter keyboard plates for students with limited hand use. Professionals working with

the handicapped or equipment supply catalogs are excellent sources of information on specially designed equipment. Occasionally, made-to-order equipment may be needed. It is the most expensive type of special equipment.

The following are general suggestions for adapting facilities and equipment to meet the needs of students with different physical handicaps. However, the needs of individual students should be considered before actual modifications are made due to variations among students with similar handicaps. Additional suggestions are available from organizations serving persons with various handicaps.

Orthopedically handicapped. A number of special considerations must be made in planning facilities and equipment to meet the needs of students in wheelchairs, on crutches, or with artificial limbs. Modifications to facilities might include the following:

- Nonskid floors should be used to facilitate handling of crutches and wheelchairs.
- Doors should be at least 3 feet (90 mm) wide.
- Adequate unobstructed space should be allowed in aisles and around power equipment and storage areas for students in wheelchairs.
- Some desks, storage, and work areas should be provided at a height appropriate for a student in a wheelchair.
- Simple handles rather than knobs should be used on cabinets for amputees with artificial limbs and for persons with limited hand use.
- Light switches should be located 42 inches from the floor, and electrical outlets at least 12 inches from the floor for easy reach by students in wheelchairs.
- Sinks and water controls should be accessible to students in wheelchairs.
- Emergency equipment (fire extinguishers, alarm buttons, etc.) should be located 42 inches from the floor to be in easy reach of students in wheelchairs.
- If a telephone is included in the classroom, its dial should be placed 48 inches from the floor and should be the pushbutton type.

- An emergency call button in the teaching area is recommended. It should be placed so as to be accessible by a student who has fallen from a chair or wheelchair if the student is alone in the classroom.

- Support rails should be fixed to the walls near the doors and windows.

- A mobile demonstration table may aid instruction since it can be moved from student to student.

- Guard plates should be used when feasible on power equipment operated by students with limited hand use, incoordination, or immobility.

- Small equipment should be placed on surfaces that may be varied in height.

- Controls should be adapted according to the student's handicap. (Hand controls or chin controls may be added to machines usually operated by foot or hand controls, respectively.)

- Special lightweight hand tools or tools with extra large handles may be purchased for use by students with weak hands.

- A brace or weight clamp can assist students with limited use of their hands when they need to hold something.

Visually impaired. The majority of equipment will not require modification. When modification is required, the extent will depend on the amount of vision the student has.

The adage, "A place for everything and everything in its place," is especially applicable for the vocational program serving visually impaired students. Specific suggestions include the following modifications:

- Bells rather than lights as warning signals

- Guard plates (where feasible on power equipment)

- Easily accessible controls and switches

- Tactile rather than visual markings on controls (braille tape or raised marks made with dots or glue can be used)

- Specially designed tools
- Services such as readers or interpreters
- Special equipment including electronic scanners or extra lighting
- Cassette tapes or records for frequently referred to information
- Printed material in braille or large type

Hearing impaired. The primary modification is the use of lights instead of bells or sounds. Lights should be used in addition to bells on fire alarms, class bells, timers, typewriters, and as the emergency stop signal on equipment. Lights can also be used to signal when a piece of equipment is in operation.

Hearing impaired students may need modifications such as these:

- Simplified written versions of cassette tapes and other audio materials.
- An interpreter or tutor to relate verbal messages.
- Captioned filmstrips, charts, and visuals.

Evaluation

Evaluation is an effective tool for helping students see their own growth. Objectives should serve as the basis for all evaluation. Evaluations should be based on data obtained through the use of the sound measurement techniques described in other modules in this series. Work done in class, simple projects, reports, self-evaluative instruments, and tests can all be used to measure student growth. The evaluation technique that is best for one student may not be best for another.

Paper-and-pencil tests. A paper-and-pencil test is one of the most frequently used methods of evaluation. It is used to evaluate knowledge and intellectual skills and sometimes to evaluate affective objectives. Although a written test cannot effectively appraise psychomotor skills, it can be used to evaluate the principles that accompany these skills. A pencil-and-paper test should be simple and require very little reading

and writing. Deaf students can be given a pencil-and-paper test. If pencil-and-paper tests are given to visually handicapped students, the test should be in large type or in braille.

Oral tests. Oral tests are especially useful in evaluating visually handicapped students. Oral tests can also be used to identify errors in students' understanding and reasoning. By asking probing questions, the teacher can determine why a student answers a question incorrectly. Such information is extremely useful to the teacher. Oral testing also reveals how well students can apply their knowledge to new situations, though this can be tested by pencil-and-paper tests as well. Role-playing various occupational situations can be used successfully in oral testing.

Visual tests. Identifying and working with objects will make testing easier for visually and auditorially handicapped students. Questions should be asked orally for visually handicapped students and should be written on large cards for auditorially handicapped students. Audiovisual techniques such as tape recordings, films and filmstrips, photographs, slides, transparencies, pictures, cartoons, and graphs are also useful for evaluating personal qualities, knowledge, and skills.

Non-test devices. The trainable mentally retarded should be evaluated by the teacher through such non-test devices as checklists, rating scales, and score cards. Reporting forms, including project reports, diaries and logs, questionnaires, anecdotal records, and autobiographies, can be used to evaluate skills, knowledge, and personal qualities. Evaluation should be a continuing process so that the teacher can determine the student's progress and readiness to go on to the next learning experience.

Guidelines for selecting sex-fair measurement devices. Title IX legislation prohibits the use of any interest or occupational inventory for appraising or counseling that requires or permits differential treatment on the basis of sex. When selecting a measurement device, you should consider the following guidelines.

- Terms. Do specific items in the tests and inventories use gender-neutral terms such as "their," "they," "people," and "humans" rather than "he," "him," "men," and "mankind"?

- Items. If gender-specific content or examples are used, as "a woman drives 40 miles...," "a man purchases 3 pounds of meat at...,"

  (1) are both sexes equally represented?

  (2) are both sexes represented in a broad variety of activities rather than stereotyped ones?

- Forms. Is there a common form for both sexes? If not,

  (1) is it shown empirically that the separate forms are more effective in minimizing sex bias?

  (2) are items on the separate forms gender-neutral, are both sexes equally represented, and represented in nonstereotyped activities? (See 1 and 2 above.)

  (3) are there instructions on how to use both forms with both sexes? (This is recommended to reduce sex-stereotyping effects when there are separate forms.)

- Norms. Are the norms the same for both sexes? If not,

  (1) are both sets of norms used with both sexes for interpreting results?

  (2) are they reported in a way that minimizes rather than maximizes differences between the sexes?

  (3) is there a justification for separate norms that is not based on sex-stereotyped beliefs, attitudes, and past expectations?

  Are the norms for reporting and interpreting results based on:

  (1) fairly recent data?

  (2) representative and appropriate samples that include both males and females?

- Manual. Does the publisher/author explain how he or she has attempted to eliminate sex bias? Does the manual discuss and caution against possible environmental, social, cultural, and user biases? Are directions for administering the instrument free of sex-

specific examples and references that could influence respondents?

- Manual and Student Report Form. Are the discussions and examples provided for interpreting results gender-neutral, balanced, and nonstereotyped? Will the student report form reduce rather than reinforce sex-stereotyped expectations (e.g., are ranges and variability explained rather than using phrases such as "On the average, women have higher verbal scores")?

- Personality Inventories. Will interpretation of results reduce rather than reinforce sex-stereotyped norms, expectations, and characteristics (e.g., can both sexes indicate high concern for others without that concern being interpreted as a feminine rather than humanistic characteristic)?

- Occupational and Basic Interest Inventories. Will interpretation of results expand options, provide broad rather than limited areas of interest, and encourage freedom of choice (i.e., is an area of interest related to a variety of activities rather than sex-stereotyped ones? Will a male with interests related to the medical profession be provided with occupational options such as nursing and medical technician)?

Appendix A contains additional facts on sex stereotyping in achievement, personality, and interest measurement.

Funding Sources

In planning programs for special needs students, curriculum specialists may apply to their state departments for funds allocated for program improvement activities. Programs may be funded in any of the three basic categories of program improvement services:

Research. Funds may be used for developing new curriculum materials or reviewing and revising curricula to eliminate stereotypes based on sex, race, or national origin.

Exemplary and innovative programs. States must give priority in the awarding of funds for exemplary and innovative projects to those that are designed to reduce stereotyping in vocational education.

Curriculum development. Funds may be used for the development and dissemination of curriculum, guidance, and testing materials designed to overcome bias in vocational education programs, and for support services to assist teachers in meeting the needs of students enrolled in vocational education programs that have been traditionally limited to members of the opposite sex.

Special services. Funds are also available to provide vocational education services for:

- persons who have been homemakers but who are seeking employment as a result of separation or divorce;
- single heads of households who lack adequate job skills; and
- persons (female and male) who are in jobs that have been traditionally considered appropriate for their sex and who wish to seek jobs in areas that have not been traditionally considered appropriate for persons of their sex.

These programs must include three components:

- Organized education programs to prepare persons in these special groups for employment
- Special courses preparing these persons in ways to seek employment
- Placement services for graduates of these special programs

Individual Study Activities

1. Review at least one commonly used text, film, test, or other instructional materials, looking for biases and stereotypes in language, dramatizations, or pictorial representations. Write a critique of the material, pointing out the biases and stereotypes and then showing how the materials could continue to be used.

2. Read Albright, L. Administering programs for handicapped students. Professional Development Series, No. 3. Arlington, VA: American Vocational Association, 1979. Then answer the following questions:

   - What is an IEP?
   - Who should be included on the team developing the IEP?
   - What is the role of the vocational educator in IEP development?

   On the following page the components of an IEP are listed. Match each component with its definition.

IEP

Components	Definitions
____ Present level of functioning	a. Child's educational needs, determined without regard to the availability of services, including educational programs, media, materials, and related services
____ Statement of annual goals	b. Objective criteria, evaluation procedures, and schedules for determining on at least an annual basis whether the short-term instructional objectives are being achieved
____ Statement of short-term instructional objectives	c. Amount of time the child will participate in regular education programs
____ Statement of specific educational services	d. Statement based on the child's present levels of performance, including academic achievement, social adaptation, prevocational and vocational skills, psychomotor skills, and self-help skills
____ Beginning and ending dates	e. Statements describing, in specific, objective, and measurable terms, the intermediate steps towards achieving the goal
____ Extent of integration into the regular program	f. Individuals who are responsible for implementing the child's educational program
____ Persons responsible	g. Description of the educational performance to be achieved by the end of the school year
____ Evaluation	h. Provisions for transition into regular class program if pupil is to be transferred from special day class, center, or nonpublic school into regular class in public school
____ Graduation competencies	i. Date when services will begin and length of time the services will be given; short-term objectives dates
____ Transition into the regular program	j. Description of any alternative means and modes necessary for the pupil to complete the district's prescribed course of study and meet or exceed proficiency standards for graduation

Discussion Questions

1. What physical problems is a wheelchair-bound student likely to encounter and what might be done about them:

   - in a horticulture course involving greenhouse work?
   - when the class is meeting in a first floor room reached by a flight of six steps?
   - when the class is in food preparation, and the kitchens are equipped with standard appliances and overhanging storage cabinets?

2. Discuss the meanings of the following terms and provide examples of how each may be manifested in your classes, materials, curricula, or district policies.

   - discriminatory behavior
   - biased behavior (or materials, practices, etc.)
   - fair behavior (as it relates to males and females, handicapped, disadvantaged, minorities)
   - affirmative behavior (as it relates to the special student groups considered above).

Group Activity

1. In small groups, select one special student population. Role play your problems with enrolling in and successfully completing a vocational program and with being placed in a supportive work experience or on-the-job situation. For example, one small group may choose to be all physically handicapped or all older women who are now displaced homemakers. Create the role-playing scenes around actual barriers seen in your own districts or classes.

Summary

In the early 1960s, the focus of vocational education legislation shifted from meeting the needs of employers to meeting the needs of individual students. With this shift came the demand that special needs students be provided with vocational programs and support services that would allow them equal access to educational opportunities.

The emphasis on the special needs of students continued into the 1970s with the increasing pressure to ensure that women, disadvantaged, handicapped, and limited-English-speaking students be afforded the same opportunities in vocational training as all other students.

Barriers to equal access are varied for each special student group. Most obvious are the physical barriers that prevent handicapped persons from obtaining certain kinds of training. Less obvious are the attitudinal constraints of educators, employers, and the students themselves.

Planning for special students, therefore, must be deliberate and must take into account both the apparent and the hidden barriers to successful program completion. Curriculum specialists, in adapting or developing vocational education curriculum, should consider the total environment of the student with special needs. With the help of instructors, administrators, counselors, parents, advisory committees, and community employers, the curriculum specialist can coordinate the various components of and responsibilities for producing an action plan or curriculum.

Vocational curricula must be adapted to encourage the enrollment of and successful completion by special students. The instructional methods and materials should also reflect a bias-free environment. Guidelines for reviewing new materials and for using existing materials can be extremely helpful to educators. Such guidelines are particularly important for discerning the subtle stereotypes of language and visual instructional methods.

APPENDICES

Fact Sheet on Sex Stereotyping in Achievement, Personality, and Interest Measurement

- Sex discrimination, stereotyping, and bias found in measurement instruments has been due to:
  - procedures used for developing instruments
  - specific terms used in items
  - content or examples used for items and responses
  - procedures for administering an instrument
  - separate sex forms
  - separate sex norms
  - manuals for interpretation of results

- In an analysis of 27 achievement test batteries from seven major test publishers:
  - All but one had a higher ratio of male to female nouns and pronouns.
  - Two to 14 male nouns or pronouns for every one female noun or pronoun was found for 19 batteries.
  - The ratio usually increased with grade level.
  - Males were portrayed mainly in traditional male activities.
  - Women were portrayed almost exclusively as homemakers or in pursuit of hobbies.
  - Young girls were usually involved in household, indoor, stereotyped activities.
  - Various items implied the majority of professions were closed to women.

- An analysis of 29 achievement test batteries for nine major test publishers replicated the above results and also found:
  - Most biographies were about men.
  - Male sex-stereotyped behaviors were reinforced when males were shown as condescending toward females.
  - Content bias in favor of males appeared to be a function of content selection rather than of language usage.

- College Admission Testing Program materials tend to show the same biases as achievement tests, and manuals and student booklets used in interpreting results usually portray the college candidate as a male.

- Personality tests such as the Minnesota Multiphasic Personality Inventory and the California Psychological Inventory are listed in previous editions of Buros' Mental Measurement Yearbook with male versus female scores.

- Differential treatment of the sexes in the development of occupational and interest inventory scales with separate forms and norms has:
  - limited both sexes from being provided a complete picture of their interests
  - perpetuated traditional career patterns for both sexes
  - excluded each sex from some occupations included for the opposite sex

- Frequently used interest inventories have had separate norms for males and females. These have included the
  - Strong Vocational Interest Blank
  - Kuder Occupational Interest Survey
  - Ohio Vocational Interest Survey
  - Vocational Preference Inventory

  The Strong Vocational Interest Blank also limited the number of occupations presented to women, had a different form for each sex, and used an antiquated masculinity-femininity scale for interpretation of results.

  The Kuder Occupational Interest Survey provided 57 occupations for females, 20 less than the number provided for males, and did not include prestigious professions for women in the college major scales.

  These criticisms have been attended to with a new interpretive leaflet for the Kuder Occupational Interest Survey (Form DD) and a new Strong-Campbell Interest Inventory, but the former materials are still in use.

- Manuals for interpreting results of occupational and interest inventories:
  - have been oriented towards males
  - frequently have had subtle implications that could bias counselors when interpreting results for females
  - have not dealt with the effects of sex-role stereotyping on occupational choices

- In experiments in which special instructions were given to females to reduce the effect of sex-role stereotyping and role conflict on their responses:
  - they reported different areas of occupational interests
  - their scores on occupational scales increased

Self-Check

GOAL 1

1. What are the three federal laws concerning vocational education for the handicapped, and what is the significance of each?

2. True or False

____ ____ a. Admissions to vocational programs may not be based on quotas for either sex, preference for one sex, or ranking applicants separately by sex, marital, or family status.

____ ____ b. A public vocational school offering a program in machine tool design cannot give preference to males on the grounds that jobs for females are scarce.

____ ____ c. An educational institution may not use tests or other counseling materials that use different forms for each sex.

____ ____ d. Federal legislation gives specifications for sex-fair textbooks and curriculum materials.

3. Sections of which major vocational education legislation first specified that funds be set aside for disadvantaged students?

4. Sections of two laws passed in the 1970s that specifically deal with the elimination of sex discrimination and stereotyping in education are:

5. What are the typical barriers to equal opportunities in vocational education that special needs students face?

GOAL 2

1. What general categories of information should be considered in planning, implementing, and evaluating instruction for special students in vocational education?

GOAL 3

1. How would you adapt instructional materials for use by visually impaired students?

2. For each of the diagnostic and instructional materials listed below, suggest one method for evaluating whether the information is biased or stereotyped.

   - Textbooks
   - Teacher's manuals
   - Films
   - Charts
   - Interest inventories
   - Aptitude tests

Self-Check Responses

GOAL 1

1. The Rehabilitation Act of 1973/Section 504--Section 504 is the basic civil rights provision with respect to terminating discrimination against handicapped persons.

   The Education for All Handicapped Children Act of 1975--This act requires that every state and its localities, if they are to continue to receive funds under this act, must make available a free appropriate public education for all handicapped children.

   Vocational Education Act Amendments of 1976--This law strengthens the abilities of states to provide vocational education to groups for whom the need is most acute, the handicapped being one of these groups.

2. a. True

   b. True

   c. True

   d. False

3. Vocational Education Act of 1963 and 1968 Education Amendments

4. Title IX, Education Amendments of 1972, and Title II, Education Amendments of 1976

5. Barriers can include attitudinal--low level of self-confidence; situational--lack of money for self-support or tuition and lack of time for training; and institutional--stringent prerequisites, lack of open entry-open exit classes, lack of accurate information about training opportunities.

GOAL 2

1. Planning Instruction

   Information about the handicapped student
   Information about yourself
   Job/task analysis
   Cooperative goal setting

Needed course modifications
Other needed modifications
Helpful resources

Implementing Instruction

Student assessment following initial instructional period
Initial assessment of yourself and others
Revisions of instructional strategy

Evaluating Instruction

Student's development in vocational skills
Student's development in work attitudes and habits
Work placement considerations
Performance on the job
Overall assessment of outcomes

GOAL 3

1.
- Convert printed material into braille or large type.
- Put frequently used material on cassette tapes or records.
- Seek services such as readers and interpreters.
- Obtain special equipment such as electronic scanning devices or extra lighting equipment.

2.

Instructional Materials	Evaluating for Bias
Textbooks	Is language sex- and race-fair?
Teacher's manuals	Are directions free of examples biased against special students?
Films and filmstrips	Are photographs free of overt and subtle biases and stereotypes?
Charts	Do illustrations include both sexes, handicapped, minorities?
Interest inventories	Does interpretation expand options for all students?
Aptitude tests	Are norms based on samples representing all student groups?

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VECS Module Titles

Module 1: Vocational Educators and Curriculum Management

Module 2: The Scope of Vocational Education

Module 3: Organization of Vocational Education

Module 4: Legislative Mandates for Vocational Education

Module 5: Priorities in Vocational Education

Module 6: Vocational Education for Students with Special Needs

Module 7: Vocational Needs Assessment and Curriculum Development

Module 8: Conducting Task Analyses and Developing Instructional Objectives

Module 9: Selecting Instructional Strategies and Assessing Student Achievement

Module 10: Relating Learning Differences and Instructional Methods

Module 11: Selecting and Preparing Instructional Materials

Module 12: Evaluating Vocational Education Curricula

Module 13: Conducting Follow-Up Studies and Communicating Evaluation Results

Module 14: Managing Vocational Education Programs

Module 15: Preparing for Curriculum Change

Module 16: Staff Development